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ABSTRACT

A pilot study investigated the relationships of career indecision, communication anxiety, and attrition of university students. Ten honors students from a college of arts and sciences were invited to a 3-day intensive focus on career decision making. The honors students reported satisfaction with the 3-day program. Information from these students was used to develop a career indecision questionnaire. The Career Anxiety and Career Indecision Questionnaire was administered to 50 students in 2 sections of the basic speech communication course at a Southwestern multi-university before the first speaking project. Results indicated that there are problems with career indecision at universities, that communication anxiety does exist, and that student attrition might be the result of these frustrations. Helping to impede student attrition caused by career indecision, communication anxiety, and lack of information and frustration is a natural undertaking for instructors in the basic speech communication course. Basic speech communication instructors have the power to guide students along positive and productive future tracks. (Contains 73 references.) (RS)

The Effects of Communication on Career Decision Making Anxiety

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Commission on the Communication Needs of Students at Risk
Program: Communication, Consciousness and Culture:
Social Issues, Educational Issues, and the Student at Risk

Communication and Its Effects on Career Indecision

Research was designed to find out the following about career indecision: (1) Is there a link between career indecision and communication anxiety, as the result of intra, inter, and public communication? (2) Is there a perception by university students that career indecision is related to student attrition and the students at risk from their university? (3) Are there intervention possibilities that could be employed in the basic speech communication course which could help alleviate student career indecision? With the support of grant monies for the last three years, a study concerning these questions was completed, and a continuing study is in progress. The results of the pilot study and the initial results of the ongoing study are presented in this paper.

Introduction

To find out what one is fitted to do
and to secure an opportunity to do it,
is the key to happiness.

John Dewey

Effective career decision making begins with an understanding of one's self. It is something that must be developed and must be the result of self confidence and self knowledge, based on researching one's self awareness. In addition, change is certain; it is something that a person must accept and meet. Needs, wants, attitudes, lifestyles, values, interests, talents, skills, abilities, experiences need to be identified because they can and will effect and influence a person's path in life and the resulting changes, including career choice.

A major difficulty with career decision is the bombardment of communication information and feedback a person receives, both internally and externally - intrapersonally, interpersonally and public. These messages effect, and often impede, the career decision making process. Confusion and frustration may result.

The terms intra, inter and public communication are used in this research: (1) intrapersonal communication, relating to career decision making, refers to a person's thoughts and feelings about career options. This may begin when a person is quite young and perceives herself/himself to be a, "rich man, poor man, beggar man, thief..." to even a president or a

king. Included may be all of the dreamed and fantasy career options, as well as those that appear to be realistic, including self knowledge about personal values, limitations, and capabilities; (2) interpersonal communication, relating to career decision making, refers to all the information a person receives from others - family, peers, friends, teachers, counselors, etc. As an example, "You should be an engineer; you are good at building with blocks." " You should be a doctor like your father." These messages may be realistic or contain elements of misinformation and fantasy; (3) public communication, relating to career decision making, refers to what an individual receives by way of test results (interest,, aptitude, etc.) and what a person has learned about career information. All of these forms of communication play significant roles in a person's perceptions of his/her career decision making actions or career indecision state.

The career decision making process is a concern in the literature, but little progress has been made in establishing successful interventions or an effective career decision making model. Further, the identification of students with career decision making anxiety has been an additional dilemma, and largely unresearched area.

If it is true that career indecision with university students is a problem, the result could be permanent student attrition or the stopping out of students (students who take a break and who may intend to resume college experience and to get a degree). If the problem could be alleviated by interventions, such as more career counseling, or by using a classroom situation for student career research, then perhaps career indecision could be reduced.

Career Indecision

Career has been defined in many ways. One modification and combination of definitions is: A career reflects one's total lifestyle, including both horizontal job changes and vertical mobility. Career would incorporate the various patterns of choice at any given time - education, work, community service, personal affiliations or avocational activities. It would also include choice as a continuing process through which a person engages in several sequences of developmental tasks necessary for personal, vocational, and psychological growth (Salomone & Palmer, 1978).

There is a difference between the undecided student and the indecisive student (Salomone, 1982). Psychological, social and economic factors are consistent with the view of work and how it fits into an individual's lifestyle

(Amundsen, 1987). Subtypes of undecided students were explored through research involving cluster analysis. This study involved undecided students and decided students, and found four distinct subtypes of undecided students: planless avoiders, informed indecisives, confident but uninformed and uninformed (Larson, & others, 1988). It was suggested that different intervention methods apply.

In the late 60's, Crites (1969), based his career counseling approach on a belief that both reasons and emotions are a part of any vocational choice, and that the choice of careers is not a one time event, but indeed a process. It is necessary then, for students to have the necessary tools in which to make career decisions such as self exploration (values, interests, skills), problem solving and decision making skills. Then, come the tasks of putting the plan together, sorting out the important information, making the decisions, and researching career information (what careers there are, where information is found and what pre experience is available).

Earlier work includes a model for comprehensive career counseling done by Crites which dealt with career choice. He presented a model for comprehensive career counseling with client choice of occupation and information on how that choice was made (Crites, 1976). His Career Maturity Inventory (CCMI), an inventory with items concerned with attitudes and competencies, is widely used (Crites, 1978). Healy (1982) described four methods for instructing in career counseling and suggested that the attitudes in the CMI should be taught before taking the inventory.

In colleges and universities, academic advising is usually more a time to sign up for classes than to talk about career choice. Due to heavy appointment schedules, counselors usually make 15 minute appointments for this purpose and, if students seek career information, they must find a source on campus where information or testing is possible. It is, however, a task students put off. In changing majors, most students relied primarily on university printed materials for their information (Elliott & Elliott, 1985).

An article that appeared first in 1952 made a lasting contribution to career counseling. The theory has three basic elements: occupational choice as a process, one that is mostly irreversible and the fact that compromise is essential in every choice (Ginzberg, 1988). This theory can be coupled this with the fact that core self-beliefs play a major role in career decision making (Borders & Archadel, 1987).

Career indecision becomes apparent and important during high school. An assumption exists that somehow a high school student will receive an inspiration from somewhere or someone about career choice, in spite of a lack of information. High school students seem to receive little actual career counseling. With already filled high school curriculums and overworked counselors, students leave for colleges and universities with little information. Savickas (1990), a professor in the Behavioral Sciences Department at Northeastern Ohio Universities College of Medicine, worked with a career decision making course designed for junior high school students through the second year in college. He had some interesting initial results in testing tenth graders. Research over time reveal if the learned decision-making skills will continue to work with career choice and, indeed, transfer to other life roles.

Career indecision, then, is a problem. Much unnecessary time is wasted while students flounder. Graduating high school students, who have received little or no career counseling, are expected to choose a job or career, extra schooling or college or university study. Once making a choice, little or no counseling may, again, be the result, and the great frustration and confusion begins. At universities, students often drift in wrong directions and either leave academic life forever, stop out, or graduate not knowing what their career interests are.

At the university level, students often find themselves forced to blindly choose a major and a career path while they are equipped with little, or no, career information. Often these choices are the result of a total gamble. Changing majors is a result of a lack of career decision making. The director of Student Advising, College of Human Development at The Pennsylvania State University (Elliott, 1984), stated: "In the first year, half of the entering class of freshmen may be expected to change their major at least once. Some will change their major several times. Others may not only change their major, but also their college or university." Changing career majors, however, may be a result of either the gain of academic experience or career maturity (Titley, and Others, 1976).

Further, dissatisfaction with major choice were more prone to uncertainly as far as career choice was concerned (Ware and Pooge, 1980). Most literature studies concentrated on career maturity, change of academic achievement on freshmen in college, despite the fact that most colleges have sophomores select the major (Elliott, 1984). Another study looked at the relation between scholastic achievement and decision-making style, and vocational maturity of freshmen, where a modest relationship was found (Phillips, 1982).

There seemed to be evidence in the research that sex role norms, coupled with interpersonal communication norms and patterns, also influence occupational decision. Traditionally, male sex roles and female sex roles are related in careers in terms of competition and values. In one study, women and men differed on coping factors with career indecision (O'Hare & Beutell, 1987). Role models for females seemed to have a great influence on career decisions (Basow, & Howe, 1980).

In the future, career decision making problems will greatly increase, if the predictions are correct that people will have to adapt to even more job and career changes. Many will make an average of 3 occupation changes and 6 job changes during the adult years. Career indecision, then, is a serious problem.

Career Indecision and Communication Anxiety

All individuals pass through stages of development (Levinson, 1978, Gould, 1978 and Erikson, 1978). Career indecision is often the result of changes in these stages. Change often produces anxiety. One study tested the Career Decision Scale (Osipow et Al, 1976) and the Self-Evaluation Questionnaire (Kaplan, D. & Brown, D., 1987), and linked student anxiety with career indecisiveness.

The process of problem solving and decision making, that would help to deal with this subject, are not usually taught skills. The change from the "work day" of high school to the "work day" at the university is often felt as a transfer from one secure situation to another. The student has a prescribed work life, and decisions for a future life plan may be avoided. The tendency to avoid fact-finding on careers and deal with personal problem solving and decision making is often put off to an indefinite time.

Students who are trained to fact-find for career information, and to deal with the process of problem solving and decision making, might find anxiety, at the very least, able to be controlled. There is a tendency to put off thinking because of more interest in interpersonal commitments than for career, vocational and academic commitments (Galotti & Kozberg, 1987). Individuals become anxious when asked to communicate about career decisions when their thoughts are uncertain. Indecision causes students to feel out of control of their situation in life, insecure and vulnerable.

Anxiety with career decision making often causes students to need counseling and help (Mitchell & Krumboltz,

1987). One research study presented six theoretical models to represent potential patterns of relationships between career indecision and anxiety in an attempt to develop career interventions (Newman et Al, 1989). Anxiety, not unlike the speech communication apprehension and anxiety apparent in public speaking and in interview situations, is felt. Similar physical, psychological and behavioral symptom occur, and the result may be avoidance of the situation.

Career Indecision and Its Relationship to Attrition

During the 1980's, more than fifteen million students enrolled in the more than three thousand colleges and universities in the United States. The predictions were that 40 per cent of them would graduate in four years, and the remaining 20 percent would eventually return to institutions to finish degrees (Cope, 1978, Higgerson & Buckley, 1983). With the considerable cost of recruitment, and increasing budget cuts, retention of students has become a big priority. There was a marked increase in research in this area beginning with the 1960's. Researchers found that, in general, at pattern was emerging (the 40-20-40 pattern) where 40 per cent of entering students to institutions would graduate in four years, 20 per cent would graduate at a later time, either from that institution or another, and 40 per cent would never graduate (Cope, 1968 and Pantages and Creedon, 1998).

This attrition problem has serious social, psychological and financial implications for society with its impact on higher education. The number of high school students is declining and, with it, the potential enrollment for higher education. The birth rate declined 26 per cent from 1963 to 1975, according to the Statistical Abstract of the United States, and it was forecast that between 1979 and 1995, there would be declining numbers of high school graduates in all but ten states (Noel, 1985). Noel also found, after a fact-finding study and workshop on attrition and retention at Oklahoma State University in 1985, that the freshman dropout rate was 30 to 33 per cent. In addition, he found that a 68 per cent of the graduating seniors had changed majors 2.8 times. Only 30 per cent of freshmen graduated in their original major.

Attrition problems have no easy answers because there are many unrelated variables. Hoyt (1978) suggested that persistence was indeed a choice and that the absence of satisfaction gave students a variety of choices, including leaving the institution. Identification of potential drop outs has been done by Astin (1975, 1977), Pascarella and Terenzini (1979, 1980) and Bean (1980) who followed up on the

early work of Spady (1970, 1971 and Tinto (1975). Astin (1984) furthered this research by stating that the quality and the quantity of student involvement in an educational program was directly associated with a students' learning and personal development in that program. Satisfaction that a job or career will be the result of a university education is an important factor in the students decision to stay at the university.

There are underlying themes of student attrition. Uncertainty about career choice and academic boredom and uncertainty about purpose were some of the themes where frustration was the result (Noel, 1985). This problem was in the middle of transition and adjustment difficulties, the limited and the unrealistic expectations of colleges, and the felt frustration of irrelevancy from a seeming lack of rationale for courses students had to take.

Alexander Aston (1977), in his book, Preventing Students From Dropping Out, stated the problem clearly:

> Dropping out of college is a little like the weather: something everyone talks about but no one does anything about. This predilection for talk over action is reflected in much of the research on dropouts, which has focused more on counting, describing, and classifying them than on seeking solutions to the problem (p. 1).

Identification and Interventions

In the intrapersonal communication aspect, students need to be aware of their self exploratory possibilities. They need a to be encouraged to construct a life grid, detailing the paths their lives have taken to their current point in time. The thoughts about all of the career ideas and options that have interested them, from the intra, inter and public communication levels, need to be remembered and recorded.

In communication on an interpersonal basis, students need to think and to record who has influenced them about career decisions in the past, family, teachers, counselors, peers, etc. For example, families play a big role in influencing their offspring and each other. Family roles, expectations, and patterns (Lopez & Andrews, 1987) communicate preferences in career choice both subtle and intentional. Often a parent's educational status or occupation play major roles. The roles and the expectations for females, as an example, has certainly changed over the last two decades.

In the public communications aspect, students need to record out all the written information they have to date about themselves (IQ, interest, aptitude tests, etc.). Records are available in their high schools. More surveys and instruments which measure interests, aptitudes, etc. are available at university counseling offices. Turning to career centers for guidance in career choices, becomes a must for individuals suffering from career indecision (Ducharme, 1990), but this task is often ignored or postponed.

With career information and self assessment, students are ready to address career decision making. Unfortunately, students do not often do this. This may be because of anxiety and the lack of focus on the future. More needs to be developed beyond what is currently available by incorporating career information into university courses and by making career decision making a coordinated effort in the university curriculum. Students would then be able to identify the fit of course work with life work. Additional counseling is only one answer, which instructors who have identified problems, can recommend.

Research has been done primarily in the counseling area. Unfortunately most students do not actively seek help. Career courses do exist on many campuses, but are elective in nature, and because of general education courses and required courses, are not generally taken by many college and university students. Since students often do not have opportunities or the motivation to explore career tests and career classes, instruction in this area should be available somewhere. Some colleges and universities are trying new, innovative approaches as interventions. In Berea, Ohio, at Baldwin-Wallace College, an assessment center was established to assist students in developing their career planning skills. Resource professionals and business executives help the center in evaluations. Simulated exercises are used with students and observed and rated by people who assess them. The ability to perform is also measured (Peters, Peters and Moomaw.).

The effectiveness of computer-assisted guidance systems was studied at Pennsylvania State University and the University of Virginia (Garis and Niles, 1990). DISCOVER and the CAREER DECISION SCALE (American College Testing Program, 1988) were used as pre and post tests, as well as the SCD, Survey of Career Development and the SACP (Self-Assessment of Confidence and Progress in Educational/Career Planning. There appeared to be evidence that students benefitted from these tests. The trend towards computerized career information and guidance programs is increasing and most colleges have one interactive system or more (Johnson, Buescher, & Heppner (1988). Many universities offer

information and testing on a computer system (Harris-Bowlsbey, 1985).

Once career information is obtained, problem solving and decision making can be a problem. Decision making has been a much studied area, but as it relates to career decision, the field is limited. One study looked at career indecision from the students' perspective and presented several models (Stewart, 1985). Another article researched seven different measures of decision making and a model to correct faulty decision making (Cochran, 1983). The theory-in-action perspective of Argyris, 1976 was used in another study to examine the limitation of decision making models (O'Hare, 1987). In general, students who were able to look at their whole life schemes and who were able to address their past through examination of critical incidents encountered over the years seemed to be able to more easily make career decisions. It became part of a total life package. Self-awareness, the ability to brainstorm career possibilities, to know where to seek information was important. Persons who think that they are adept at problem solving feel more confident about decision making related to career choice (Larson & Heppner, 1985).

The Link Between Career Indecision and the Basic Communication Course and the Potential Research Areas

Although research in the area of career indecision is limited, new innovative approaches are being examined. In looking for research areas, there is a list and a review of research the areas of vocational behavior, career choice, career development, decision making, career development interventions, etc. in this area available (Fitzgerald & Rounds, 1989). Career intervention research must be done. Oliver and Spokane (1988) employed procedures for the outcome of career-intervention research. The use of an English classroom situation for career exploration was used for finding career information, as a part of an integration of career planning into the university situation (Brock, Yerian 1986). Basic speech communication courses reach a large segment of the university student population (up to 2,000 a year at Oklahoma State University. These basic speech communication course could provide a model situation for research and interventions in the area of career indecision and its relation to University attrition. Students with career decision could be identified by a questionnaire and offered an opportunity to explore their own possible career objectives with for an informative speech assignment.

Speech courses are an obvious answer for research in this area and for the opportunity for students to research

their career interests. Communication competencies are demanded of students embarking on successful careers (Muchmore & Galvin, 1983). Extending this idea further, some universities have extended their curriculum to include courses in technical speech education, special sections of the course to deal with career related objectives (Wolvin and Wolvin, 1977). To combine the knowledge of future career choice and these competencies is an ideal approach and answer. Speech teachers are natural coaches and support givers (O'Connell & Minker, 1981). Providing an opportunity for important student research in the speech course, and encouraging the student to follow up with more information would be a service both to the student and to the university.

Research Questions

Using the assumption that there are new methods for identification and, ultimately, for intervention in the basic speech communication course, this study was designed to investigate the relationships with: career indecision, communication anxiety and attrition of university students.

To begin this research, a pilot study was completed, as a result of an opportunity through research grants. This pilot study allowed for experimentation with both written and oral survey answers on this subject, as well as some other testing. The end result was the completion of a questionnaire that could be used to test university students in speech communication courses in the 1991-1992 academic year.

This newly created questionnaire, the Career Anxiety and Career Indecision Questionnaire (CACIQ) was administered to two sections of the basic speech communication course in the Fall of 1991, as well as another section of a course in the speech communication curriculum. The long range plan for this testing was to develop a career indecision identification questionnaire which could be used to test students in all sections of the basic speech communication course. Then, results would be available for instructors to pass on to academic counselors for intervention. It could also be used for instructors to identify students with indecision so that interventions could be employed in the basic course itself.

The following questions were considered in the beginning of this investigation, during the study:

RQ1: Will the students in the study honestly report their feelings on communication anxiety resulting from career indecision?

The students in the study were very willing to share their anxieties concerning career indecision, both in the interviews, the counseling and on the questionnaires that they were given.

RQ2: Is there a link between career indecision, as the result of intra, inter, and public communication, and communication anxiety?

The students in the study expressed great concern for their frustrations in their intrapersonal communication concerning career decision making and anxiety. They were also concerned about expectations and influences by others in their interpersonal

communications; some were positive, but most were negative. The students were concerned about the reliability of the testing in the public communication area. They felt that up to now, they were not very helpful.

RQ3: Is there a perception by students that career indecision is related to student attrition from the university?

The students in the study felt that it was a problem, but being honors students felt that some how, some way, they would stay in school and be gainfully employed.

RQ4: Are there intervention possibilities that could be employed in the basic speech communication course which could alleviate student career indecision?

All wished that there could be time set aside in some of their classes for career research, and that more testing was available, particularly aptitude testing.

RQ5: Would pre and post testing using, the Career Decision Scale, yield different results when the Johnson O'Connor Test and the career focused days were used as a treatment?

Results to follow.

RQ6: Would pre and post testing, using the Self Directed Search, yield different results when the Johnson O'Connor Test and the career focused days were used as a treatment?

Results to follow.

Procedures

Subjects

In the first year of this study, ten subjects were selected from a pool of College of Arts & Sciences honors students who were undecided as to major. Honors students were chosen for this initial pilot study for two reasons: (1) They were a reliable group of students who would most likely complete the study, and (2) honors students usually have many options available to them and might have even more difficulty with career indecision. The students were high achievers and involved in university activities. Most sought highly professional careers, although which specific ones were unknown at this point, and were influenced by interpersonal communication with family, friends, counselors, teachers and had various career interest tests.

They were more than eager to participate in the study and have the reward of taking a nationally recognized aptitude test, and to receive additional counseling, at no cost to them.

Letters were sent to this pool of students, offering the opportunity to take the Johnson O'Connor Aptitude Test, in Dallas, Texas, if selected, in the Spring of 1991. The Johnson O'Connor Aptitude Tests are a comprehensive battery of instruments which test: natural talents, special abilities for doing, or learning to do, certain kinds of things easily. Manual dexterity, musical ability, spatial visualization and memory for numbers are examples of such aptitudes. The testing takes place for one full day and one half day, and includes counseling on the results.

Students who responded were interviewed, and ten were selected for the three day trip to Dallas. The selected student group was composed of 6 females and 4 males, had a mean age of 20.6, had been in college from 1 to 5 years, and had from 28 to 168 credit hours. This trip meant that some classes would be missed, but that the time would be spent focused on career choice, including the taking of the two day aptitude tests and discussions with the group and the academic counselors.

The students were pre and post tested with The Osipow Career Decision Scale, or CDS, (Osipow, S.H., Carney, C.G., Winer, J.L., Yanico, B. and Koschier, M., 1976) and the Holland Self-Directed Search, SDS, (Holland, J.L., 1985) and several original career information surveys. The CDS measures a person's different components of career indecision. The instrument has 19 items, including 2 items that make up a certainty scale. It was developed originally using an undergraduate population and has been studied widely. The SDS provides information, through a career assessment by self ratings of interests on perceived abilities and values.

All testing was done 6 weeks prior to the trip (treatment) and immediately following the trip (treatment). They students were contacted twice to date about their career decisions, since the trip. The testing center gave them the COPS-P interest test, along with their aptitude tests, for assistance in their counseling session.

As a result of this three day intensive focus on career decision making, the majority made decisions, and the rest were on their way. Satisfaction was reported by all. In addition, the resulting information yielded information for the compilation of a career indecision questionnaire to be used for identification of students with career indecision.

To assess whether the brief treatment of the trip to Dallas made a difference, statistics were done on the CDS, the SDS and the original instruments.

Results from the Career Decision Scale

RQ5: Would pre and post testing, using the Career Decision Scale, yield different results when the Johnson O'Connor Test and the career focused days were used as a treatment?

The difference between the means (paired observations of the pre and the post tests for the 10 subjects) were compared, and several were significant to .05.

The scale were: 4 = Like Me to 1 = Not Like Me

Question 1: I have decided on a career and feel comfortable with it. I also know how to go about implementing my choice.

This result was significant; the probability was .0002 ($t = -3.8571$, $df = 9$, $p < .05$).

Question 5: I know I will have to go to work eventually, but none of the careers I know about appeal to me.

This result was significant; the probability was .0184 ($t = 2.4495$, $df = 9$, $p < .05$).

Question 7: Until now, I haven't given much thought to choosing a career. I feel lost when I think about it because I haven't had many experiences in making decisions on my own, and I don't have enough information to make a career decision right now.

The result was significant; the probability was .0223 ($t = 2.333$, $df = 9$, $p < .05$).

Question 10: I want to be absolutely certain that my career choice is the "right" one, but none of the careers I know about seem ideal for me.

The result was significant; the probability was .0223 ($t = 2.333$, $df = 9$, $p < .05$).

Question 13: I can't make a career choice right now because I don't know what my abilities are.

The result was significant; the probability was .0042 ($t = 3.3541$, $df = 9$, $p < .05$).

Question 14: I don't know what my interests are. A few things "turn me on," but I'm not certain that they are related in any way to my career possibilities.

The results were significant; the probability was .0087 ($t = 2.9055$, $df = 9$, $p = < .05$).

Results from the Self Directed Search

RQ6: Would pre and post testing, using the Self Directed Search, yield different results when the Johnson O'Connor Test and the career focused days were used as a treatment?

The differences between the means (paired observations of pre and post tests for the 10 subjects) were compared, and several were significant to .05. Students responded on realistic, social, investigative, enterprising, artistic and conventional scales. Activities, competencies, occupations, self estimates and totals were explored.

There were significant changes to <.05 in four of the six areas: artistic, social, enterprising and conventional, and a t test was used to determine differences between the pre and the post test.

A correlation matrix was done using sex (male and female) to find positive correlations at a significant level. The critical value on a two tail test was, at the <.05, +/-.6297. Sex was positively correlated at a significant level.

On the newly designed questionnaires, there were also significant differences at the <.05 level. Questions were studied for their appropriateness and used in the ongoing research.

Results

Positive results from treatment inspired the following research. If the Dallas trip intervention yielded positive results in the area of a student's ability to deal with

career indecision (and it was positive reinforced by statistics), then research was the next step. An exploration beyond the career indecision assessment in the CDS, and the self assessed interests as in the SDS, needed researching. Clearly, neither measured trait anxiety (responses from a general temporal - transitory, limited by time, reference point) or state anxiety (how a respondent feet at a particular moment in time), or the connection with career indecision or the effects of intra, inter or public communication. The interviews, and the results from newly designed questionnaire, the Pre CACIQ, indicated a need for investigation into the influence of intra, inter and public communication on career indecision.

Subjects for Research Testing Fall 1991

Subjects for this study were 50 students enrolled in two classes in the basic speech communication course, in the Fall of 1991, at a southwestern multiuniversity. The basic speech communication course at this university is a sophomore level course and is required of most majors in Arts & Sciences, Education and Home Economics and is required for all Business majors. The course may be selected as a social science elective in Engineering and Technology. The students at this university typically begin college after completing high school.

There were 28 sections of the basic speech course in the Fall of 1991 including an honors section), and there will be 29 sections in the Spring of 1992 (including an honors section). Twenty four of the sections in the Fall (same number for the Spring) were taught by supervised teaching assistants in the speech communication graduate program. Four sections were taught by junior/senior faculty. Students have five speaking projects in the basic course, 1 1/2 to 8 minutes in length.

The following is self-reported information from the two classes in this study:

(1) The mean age of student subjects was 21.9 years, SD 5.4, range from 17 to 49.

(2) There were 19 males and 30 females; two were married.

(3) In the study, 10 were freshmen, 32 were sophomores, 6 were juniors and one was a senior.

(4) Most subjects were in the College of Business (41) and the College of Arts and Sciences (14). The next groups were the College Education (4), followed by the College

of Agriculture (4), UAS, for undecided students, (3) and the College of Home Economics (1).

(5) One section was an honors section (n=19) and the other section was a regular section (n=30).

Procedures

Before the first speaking project, students were asked to complete the Career Anxiety and Career Indecision Questionnaire (CACIQ). No specific directions were given as to what might be contained in the questionnaire, and no clarification questions were answered. Students were told that the questionnaire was for research, and no discussion would follow its completion. The following research questions were investigated.

Research Questions

RQ1: **Do university students perceive that high school prepared them for their major and career choice?**

RQ2: **Do university students perceive that their college is preparing (or prepared) them for their major and career choice?**

RQ3: **Do university students perceive themselves to have difficulty with the career decision making process?**

RQ4: **Do university students perceive themselves to have career indecision anxiety?**

RQ5: **Do university students perceive that intrapersonal communication causes (has caused) career indecision anxiety?**

RQ6: **Do university students perceive that interpersonal communication with others (family, peers, teachers, counselors) causes (has caused) career indecision anxiety?**

RQ7: **Do university students perceive that public communication causes (has caused) career indecision anxiety?**

RQ8: **Do male and female university students perceive career choice differently?**

RQ9: **Do university students perceive themselves and others to have career indecision anxiety to a level that would cause them their attrition from the university?**

RQ10: Would university students like an opportunity to research their career choices and to give a speech about it in the basic course?

RQ11: Do university students in an honors course in the basic speech communication course respond differently than those in the regular sections?

Results of the Questionnaire, CACIQ

Responses to some of the questions in Part I, II, III & IV

Part I has questions pertaining to intrapersonal communications: career indecision, decision making skills, and feelings about student attrition from the university. Following are some of the responses to the 32 questions in from Part I of the questionnaire. Questions were taken on a 7 point scale:

7 = Always True to 4 = Sometimes True to 1 = Never True

Responses to Part I

	Mean	SD
Whenever people ask me what career I want, I say that I don't know.	3.02	1.74
I wish that I really knew my aptitudes, what I am good at doing.	4.55	1.96
I am afraid of picking a major in case that it will be wrong for me.	3.71	1.87
I am afraid of picking a career in case that it will be wrong for me.	3.80	1.90
I am afraid of picking a major in case that there will be no jobs for me in that area.	3.96	1.86
I am afraid of picking a career in case that there will be no jobs for me in that area.	3.86	1.90
I think that career indecision, and its frustrations, is a big factor with high school students dropping out of high school.	4.25	1.65
I think that career indecision, and its frustrations, is a big factor with college students dropping out of college.	5.53	1.33
I have thought about dropping out of college because of my frustration with major choice and career indecision.	3.08	2.13
Sometimes I feel that just dropping out of college and getting a job might be the answer.	3.20	2.24
My career indecision worries me.	3.20	1.95

I am afraid to make a career decision because to reverse this decision might be difficult.	3.31	1.79
I hate to make decisions for fear that they will be wrong.	3.71	1.62
Decision-making is something that is difficult for me.	3.90	1.43
I have a fear of the unknown when it comes to career decision making.	3.78	1.95
I have a fear of making the wrong decision when it comes to career decision making.	3.86	1.80
I have a fear of failure when it comes to career decision making.	3.61	1.87
If knew where to get help on career decision making, I would get it.	3.90	1.62
I am afraid that I do not have enough career information about myself to make a good career choice.	3.51	1.71
Non career specific majors worry me because I am not certain that they prepare me for a future career.	3.88	1.75
I think that everyone needs help with career counseling in order to know his/her interests and aptitudes.	4.98	1.64

Responses to Part II

Part II has questions pertaining to interpersonal communication: expectations of others (family, peers, counselors, teachers) and fears of looking ridiculous and foolish to others. Following are some of the responses to some of the 26 questions from Part II of the questionnaire. Questions were taken on a 7 point scale:

7 = Always True to 4 = Sometimes True to 1 = Never True

	Mean	**SD**
It is easier to say that I don't know what my future career will be than to discuss it with anyone.	3.00	1.96

I do not like to talk about myself when I feel that I am being interviewed about my career choice.	3.35	1.74
Expectations of others about my major and career choices has made me nervous.	3.92	1.74
I have a fear of ridicule when it comes to career decision making.	2.55	1.94
I have a fear of rejection when it comes to career decision making.	2.78	1.92

Responses to Part III

Part III has questions pertaining to gender based perceptions concerning career choices. Following are some of the responses to some of the 16 questions in Part III of the questionnaire. Questions were taken on a 7 point scale:

7 = Always True to 4 = Sometimes True to 1 = Never True

	Mean	**SD**
I think females tend to have careers that less suit their interests than males.	3.31	1.47
I think that females have lower levels of career aspirations than males.	2.94	1.41
I think public perceptions of careers for females are important factors in female career selection.	3.63	1.56
I think that females are more suited for jobs involving nurturance (teaching, nursing, social work, etc.).	3.35	1.59
I think that when a mother works, a daughter is more likely to work.	5.00	1.40
I think, for females, work is a hobby, a luxury, etc., and childrearing, taking care of a husband and family needs, are their true job responsibilities.	2.92	1.81
I think the more education that a female receives, the more likely she is to pursue a career.	5.71	1.40
I think that females receive less compensation than males for doing the same work.	4.74	1.35

With a married couple, the partner who makes the most money should determine the place to live.	3.45	1.70
I think that males avoid careers in traditionally female fields.	5.10	1.28
I think that male attitudes about female career roles influence females.	4.63	1.33
I think that males and females tend to choose careers based on sex role stereotypes.	4.41	1.26
I think that when mothers work, a son is more likely to favor his wife working.	4.71	1.32
I think that the male career should be dominant when it comes to choosing a place for a married couple to live.	3.20	1.87
There will be differences in the way that males and females answer this questionnaire.	6.02	1.38

Responses to Part IV

Part IV has questions pertaining to physical, mental and behavioral symptoms experienced by interpersonal communication, concerning future career decisions, on the intra and interpersonal communication levels. Following are responses to some of the 40 responses in Part IV of the questionnaire. There were two columns of questions, one based on intrapersonal communication and the other based on interpersonal communication. The responses were taken on a 7 point scale:

7 = Always True to 4 = Sometimes True to 1 = Never True

When I think about or talk (or have talked) with others about my future career decisions, I experience the following symptoms.

	When I think about...		When I talk (or have talked) with others)...		
	Mean	SD	Mean	SD	t value*
Headache	2.76	2.05	1.92	1.35	3.18
Word confusion	2.08	1.29	2.78	1.43	3.66

Feeling focus of attention	2.86	1.96	3.14	1.98	1.46
Afraid of being foolish	2.35	1.91	3.14	1.98	3.52
Forgetting what thinking, saying	2.73	2.19	3.38	2.11	2.83
Feeling out of control	2.30	1.90	2.59	1.92	1.85

* All $p < .05$

Research Questions

RQ1: Do university students perceive that high school prepared them for their major and career choice?

Students did not perceive that their high schools prepared them for their major and career choice. Using responses to answers 4 to 1 on the 7 point scale - Sometimes True (4) to Never True (1), the following results were reported to answers to these questions in Part I:

74.47% reported their high school did not prepare them well for choosing a college major.

63.39% reported their high school did not prepare them well for choosing a career.

RQ2: Do university students perceive that their college is preparing (or prepared) them for their major and career choice?

Many students did not perceive that their college is preparing (did prepare) them for their major and career choice. Using responses to answers 4 to 7 on the 7 point scale - Sometimes True (4) to Never True (1), the following results were reported to answers to these questions in Part I:

51.02% reported their college did not prepare them well for choosing a college major.

44.89% reported their college did not prepare them well for choosing a career.

RQ3: Do university students perceive themselves to have difficulty with the career decision making process?

Following are responses to questions concerning the career decision making process in Part I. Using responses to answers 4 to 7 on the 7 point scale - Sometimes True (4) to Always True (7), the following results were reported:

Decision making is something that is difficult for me.	57.14%
I have a fear of the unknown when it comes to career decision making.	57.31%
I have a fear of making the wrong decision when it comes to career decision making.	51.02%
I have a fear of failure when it comes to career decision making.	40.81%

There was a positive correlation between difficulty with the career decision making process and fear of picking a career that would be wrong for the student (.61103). There was a positive correlation between fear of picking the wrong career and fear of making the wrong decision when it came to career decision making and failure when it came to career decision making (.73798).

Critical Value (1 Tail, .05) = .23742

RQ4: Do university students perceive themselves to have career indecision anxiety?

Following are responses to questions concerning university student career indecision anxiety in Part I. Using responses to answers 4 to 7 on the 7 point scale (Sometimes True (4) to Always True (7), the following results were reported:

Non career specific majors worry me because I am not certain that they prepare me for a future career.	53.05%
Career decision making causes me such anxiety that I avoid thinking about it.	36.73%
I am afraid of picking a major in case that it will be wrong for me.	48.97%
I am afraid of picking a career in case that it will be wrong for me.	51.01%

I am afraid of picking a major in case that there will be no jobs for me. 53.5%

I am afraid of picking a career in case that there will be no jobs for me. 51.01%

I am afraid that I do not have enough career information about myself to make a good career choice. 44.90%

I am afraid to make a career decision, because to reverse this decision might be difficult. 40.82%

There was a positive correlation between career decision causes the student such anxiety that he or she avoids thinking about it and his/her fear of the unknown when it comes to career decision making (.59361).

Critical Value (1 Tail, .05) = .23792

RQ5: Do university students perceive that intrapersonal communication causes (has caused) career indecision anxiety?

Following are responses to questions concerning intrapersonal communication in the career decision making process in Part I. Using responses to answers 4 to 7 on the 7 point scale (Sometimes (4) True to Always True (7), the following results were reported:

I wish that I really knew my aptitudes, what I am good at doing. 67.34%

RQ3 and RQ4 questions apply in this area.

RQ6: Do university students perceive that interpersonal communication with others (family, peers, teachers, counselors) causes (has caused) career indecision anxiety?

Following are responses to questions concerning interpersonal communication in the career decision making process in Part I and Part II. Using responses to answers 4 to 7 on the 7 point scale (Sometimes True (4) to Always True (7), the following results were reported:

Whenever people ask me what career I want, I say that I don't know. 38.77%

I think that everyone needs help with career counseling in order to know his/her interests and aptitudes.	83.67%
Expectations of others about my major and career choices has made me nervous.	59.19%
It is easier to say that I don't know what my future career will be than to discuss it with anyone.	34.68%
I don't like to talk about myself when I feel that I am being interviewed about my career choice.	38.85%
My parents, or guardians, have influenced my major or my career decision-making.	32.64%
I avoid talking with family members about my major or career plans.	26.53%
My college friends have influenced my major or my career decision making.	26.61%
My college teachers have influenced my major or my career decision making.	32.65%
I avoid (avoided) talking with my college teachers about my major or my career decision making.	26.52%
My college counselors have influenced my major or my career decision making.	34.69%
I avoid (avoided) talking with my college counselors about my career decision making.	26.52%

There was a positive correlation between expectations of others about the student's major and career choices making him/her nervous and career decision causing the student such anxiety that he/she avoids thinking about it (.36342).

There was a positive correlation between expectations of others about the student's major and career choices making him/her nervous and avoidance of talking with family members about major and career plans (.45572).

There was a positive correlation between expectations of others about the student's major and career choices making him/her nervous and avoidance of talking with college friends about major and career plans (.52254).

There was a positive correlation between expectations of others about the student's major and career choices making him/her nervous and avoidance of talking with college teachers about major and career plans (.34670).

There was no correlation between expectations of others about the student's major and career choices making him/her nervous and avoidance of talking with college counselors about major and career plans (.09194).

Critical Value (1 Tail, .05) = .23792

RQ7: Do university students perceive that public communication causes (has caused) career indecision anxiety?

Following are responses to questions concerning public communication and the career decision making process in Part I. Using responses to answers 4 to 7 on the 7 point scale (Sometimes True (4) to Always True (7), the following results were reported:

I wish that I really knew my aptitudes, what I am good at doing.	67.34%
I am afraid that I do not have enough career information about myself to make a good career choice.	47.90%
I think that everyone needs help with career counseling in order to know his/her interests and aptitudes.	83.67%

There was a positive correlation between a student wishing to know aptitudes, what he or she was good at doing, and not having enough self information to make a good career choice (.51169).

Critical Value (1 Tail, .05) = .23792

RQ8: Do male and female university students perceive gender career choice differently?

Following are responses to questions concerning whether male and female university students perceive career choice differently from Part III. Using responses on the 7 point scale (Sometimes True (4) to Always True (7), the following results were reported:

Males	**Mean**	**SD**	**t value***
Females	**Mean**	**SD**	

I think females tend to have careers that less suit their interests than males.	3.74 2.97	1.55 1.43	1.78
I think public perceptions of careers for females are important factors in female career selection.	3.95 3.97	1.36 1.76	.04
I think that females have lower levels of career aspirations than males.	2.89	1.25	.17
I think male attitudes about female career roles influence females.	4.95 4.77	1.23 1.23	.46
I think males and females tend to choose careers based on sex role stereotypes.	4.32 4.67	1.08 1.42	.92

RQ9: Do university students perceive themselves and others to have career indecision anxiety to a level that would cause them their attrition from the university?

Following are responses to questions concerning the career decision making process in Part I. Using responses to numbers 4 to 1 on the 7 point scale (Sometimes True (4) to Always True (7), the following results were reported:

I think career indecision, and its frustrations, is a big factor with college students dropping out of college.	65.30%
I have thought about dropping out of college because of my frustration with major choice and career indecision.	38.77%
Sometimes, I feel that just dropping out of college and getting a job might be the answer.	38.77%

There was a positive correlation between students thinking career indecision, and its frustrations being a big factor with college students dropping out and their thoughts of dropping out because of frustration (.45705).

Critical Value (1 Tail, .05) = .23792

RQ10: Would university students like an opportunity to research their career choices and to give a speech about it in the basic course?

A final question in Part IV asked: Would you like to research your career choice and give a speech about it in this course?

Circle Yes or No. The responses were as follows:

Total Group

75.47% responded Yes (n = 36)

24.53% responded No (n = 13)

Honors

78.94% responded Yes (n = 15)

21.06% responded No (n = 4)

Regular Section

70.00% responded Yes (n = 21)

30.00% responded No (n = 9)

RQ11: Do university students in an honors course in the basic speech communication course respond differently than those in the regular sections?

Several questions were tested for the differences of paired means between the honors sections and the regular sections. The responses were taken on a 7 point scale, Always True (7) to Never True (1).

Decision making is something that is difficult for me.

	Mean	t value*
Regular	4.056	.8660
Honors	3.700	
Grand Mean	3.833	

F = .750 p = .39

I think that my college is preparing (prepared) me well for choosing a college major.

	Mean	t value*
Regular	4.667	.5652
Honors 4.400		
Grand Mean	4.500	

F = .319 p = .5747

I think that my college is preparing (prepared) me well for choosing a college career.

	Mean	t value*
Regular	4.944	.4647
Honors	4.733	
Grand Mean	3.813	

F = .216 p = .6443

I think career indecision, and its frustrations, is a big factor with college students dropping out.

	Mean	t value*
Regular	5.333	.6732
Honors	5.600	
Grand Mean	5.500	

F = .453 p = .5042

I have thought about dropping out of college because of my frustration with major choice and career indecision.

	Mean	t value*
Regular	1.667	3.9632
Honors	3.867	
Grand Mean	3.042	

F = 15.707 p = .00034

If I knew where to get help on career decision making I would get it.

	Mean	t value*
Regular	3.944	.3836
Honors	3.800	
Grand Mean	3.854	

F = .089 p = .7672

I have a fear of making the wrong decision when it comes to career decision making.

	Mean	t value*
Regular	3.944	.4614
Honors	3.700	
Grand Mean	3.792	

F = .213 p = .6467

Expectations of others about my major and career choices has made me nervous.

	Mean	t value*
Regular	3.611	.7634
Honors	4.000	
Grand Mean	3.854	

F = .583 p = .4491

I have a fear of ridicule when it comes to career decision making. 2.4192

	Mean	t value*
Regular	1.667	2.4192
Honors	2.933	
Grand Mean	2.458	

F = 5.853 p = .0196

I have a fear of rejection when it comes to career decision making. 2.2663

	Mean	t value*
Regular	1.944	2.2663
Honors	3.133	
Grand Mean	2.688	

F = 5.136 p = .0282

I think females tend to have careers that less suit their interests than males.

	Mean	t value*
Regular	3.389	.5202
Honors	3.167	
Grand Mean	3.250	

F = .027 p = .8702

I think public perceptions of careers for females are important factors in female career selection.

	Mean	t value*
Regular	3.611	.0467
Honors	3.633	
Grand Mean	3.625	

F = .0022 p = .9630

I think the more education that a female receives, the more likely she is to pursue a career.

	Mean	t value*
Regular	5.556	.5012
Honors	5.767	
Grand Mean	5.688	
F = .251 p = .6186		

Part IV - Symptoms	t value*
Headaches.	3.1814
Feeling the listener disapproves.	5.5177
Afraid of looking foolish.	3.5243
Feeling out of control.	1.8516

* all $p < .05$

Recommendations and Implications for Future Research

Data from this research indicates that there are problems with career indecision at universities, that communication anxiety does exist and that student attrition might be the result of these frustrations. When asked questions about career indecision anxiety and dropping out, students responded to questions with concerns. Words like fear, frustration, anxiety, and avoidance were used in the wording of the questions. Feelings of failure, foolishness, disapproval, avoidance, fear of the unknown and avoidance were used throughout the questionnaire. Perhaps there is a silent cry that university faculty and staff do not hear.

The burden for finding information has been on the student. Often that student is confused by the glut of nonhelpful interpersonal and public communication information, or the lack of information at all. He or she is, upon entering a university, often forced to choose a university college, a major and a path toward a career. Universities offer many majors and many courses and plans of study, often without much flexibility for making changes. They are often confusing. Student choices are made despite the lack of training and ability to make well thought out decisions. Seeking help is not easy; counseling is limited. Many students who have career indecision are not helped. Students need to be encouraged to seek information about themselves and to seek information about careers.

The subject is a complex and a multifaceted problem. Measurement techniques are effective in identification. The Osipow Career Decision Scale seemed to be a reliable instrument for initial determination of career indecision. Other questionnaires may be used to focus in on the differing causes and effects, particularly in the area of intra, inter and public communication information. Students are concerned at the intrapersonal level, at the interpersonal level and at the public level. University students seem to want any help that they can receive in this area. Perhaps it is time for some creative approaches to be researched.

The basic course provides an excellent opportunity for career exploration in a unit assignment on the informative speech. Research into the person, self appraisal decision making and into the career possibilities would be a useful service. What better use of time could there be than in identifying problems in career decision and encouraging students to find answers and providing interventions.

Students need to be taught problem solving and decision making skills. The basic course usually includes these types of skills, along with planning skills, in discussion and persuasive speaking projects. The subject of anxiety is addressed in the basic speech communication course, as well. Encouragement should be given for students to seek out their career counseling centers for information. Instructors could also pass along information about specific student's career indecision problems to their academic counselors.

Career indecision, communication anxiety, helping to impede student attrition caused by lack of information and frustration is a natural undertaking for instructors in the basic course. Identification and intervention strategies could positively effect the lives of many students. Up to now, there has been little done in speech communication in this type of research and teaching. As Will Rogers once said, "You may be on the right track, but if you just sit there, you'll get run over." Basic speech communication instructors have the power to guide students along positive and productive future tracks.

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